In the specification:

Page 2, amend the paragraph in lines 4-14 as follows:

With a transformer known from DE 44 23 992 C2 for production of high electrical impulse currents, which is part of an electromagnetic generator for quick current and magnetic field impulse for production of magnetic fields in conversion technology of electrically conductive materials by means of a magnetic field, the primary coil is coiled as an elongated coil in a spiral on a longitudinally slotted supported tube made from copper ~~for~~or another electrically conductive material, which forms the secondary coil with an iron ~~corn~~core and are welded or screwed onto the contact block for the current output to a high current loop on the secondary side of the transformer on both sides of the longitudinal slit. The contact blocks are disposed in the center of the support tube, which is provided on each side of the two contact blocks with this type of primary coil.

Page 4, amend the paragraph in lines 17-19 as follows:

The primary coil ~~an~~can be wound in a simple and most space-saving manner from the inside to the outside in the opposite direction, so that both

bus bars can contact the primary coil on the outer circumference of the coil or winding.

Page 5, amend the paragraph in lines 1-8 as follows:

This has the particular advantage that no return from the center of the coil is required, as with common coils. Such a return from the center of the coil produces necessary air gaps, which lead to a minimal coil tightness and, thus, the electrical coupling factor or the electrical efficiency of the transformer can be effected detrimentally, since in the air gaps, magnetic fields ~~exists~~exist about the electrical conductor or the coil windings, whose flow lines do not go through the secondary part, thus leading to transfer loss with the production of the secondary current.

Amend the paragraph bridging pages 5 and 6 as follows:

Instead of a primary coil made from a wire-type electrical conductor, magnetic coils according to DE 36 10 690 C2 can be used as the primary coil,, which ~~comprise~~comprises multiple disks arranged in a stack and braced rigidly together with a central opening, whereby each disk has a radial slit originating from the central opening with electrical terminals arranged on both sides and includes an inner, ring-shaped region guiding the current as

well as a heat-conducting, outer region with further radial slits. The individual disks are connected in a spiral to one another in a series. This has the advantage of a particularly compact, high-duty structure with a high transfer factor and, therefore, a particularly favorable electrical efficiency.

Page 10, amend the paragraph in lines 10-16 as follows:

As shown in Figures 1 through 4, the secondary part 3 of the transformer comprises at least one electrically conductive plate 6, in which at least one cut-out 7 penetrating the plate ~~7~~6 is located. On the plate 6, in addition, a slit 8 originating from the cut-out 8~~7~~ is provided, which separates the plate 6 on one side of the cut-out into two parts and which produces the necessary bus bars. A primary coil 2 with its bus bars 4 can be electrically insulated in the plate encircling the cut-out 7.